



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,679	10/22/2003	Christopher A. Ras	2352P014	6625
8791	7590	01/13/2006		
BLAKELY SOKOLOFF TAYLOR & ZAFMAN 12400 WILSHIRE BOULEVARD SEVENTH FLOOR LOS ANGELES, CA 90025-1030				
			EXAMINER TUGBANG, ANTHONY D	
			ART UNIT 3729	PAPER NUMBER

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/691,679

Applicant(s)

RAS ET AL.

Examiner

A. Dexter Tugbang

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 12-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-25, drawn to a process of making permanent magnets, classified in class 29, subclass 609.
  - II. Claims 26-30, drawn to an apparatus that assembles permanent magnets, classified in class 29, subclass 737.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions of Groups I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the process of Group I can be performed by hand.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. If applicant(s) elect the invention of Group I, then a further restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I-A. Claims 1-11, drawn to a process that includes mechanically restraining movement of a second permanent magnet block, classified in class 29, subclass 607.

Art Unit: 3729

I-B. Claims 12-21, drawn to a process that includes inserting a second permanent magnet block into a frame that prevents movement of the second permanent magnet in more than one direction, classified in class 29, subclass 832.

I-C. Claims 22-25, drawn to a process that includes placing a first permanent magnet block in a frame having the first permanent magnet with a magnetic orientation aligned with the frame, classified in class 29, subclass 830.

The inventions are distinct, each from the other because of the following reasons:

5. Inventions of Groups I-A through I-C are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable, or include a separately usable process. In the instant case, the inventions of Groups I-A through I-C each have separate utility, or a separately usable process. For example, Group I-A includes a separately usable process of mechanically restraining movement of the second permanent magnet block, not required in any of Groups I-B and I-C. See MPEP § 806.05(d).

6. Because these inventions are distinct for the reasons given above and the search required for example, in Group I-A is not required for in Groups I-B and I-C, restriction for examination purposes as indicated is proper.

7. During a telephone conversation with Mr. Gregory Caldwell on December 16, 2005, a provisional election was made without traverse to prosecute the invention of Group I-A, Claims 1-11. Affirmation of this election must be made by applicant in replying to this Office action.

Claims 12-30 have been withdrawn from further consideration by the examiner, 37

CFR 1.142(b), as being drawn to a non-elected invention.

Art Unit: 3729

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

10. Claims 2, 3 and 8-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 2, it is unclear what is meant by the phrase of “in all but one direction” (line 3) as this relates to restraining movement of the first permanent magnet block and this phrase contradicts the previous phrase of “in at least one direction” (line 2 of Claim 1). There is a great deal of confusion and uncertainty as to the movement of the first permanent magnet block first being restrained in one direction (as recited in Claim 1), then movement is not restrained in the very same one direction, but in all of the other directions (as recited in Claim 2). So is movement of the first permanent magnet block restrained in the one direction or not?

In Claim 8, it is unclear what is meant by the phrase of “in all but one direction” (lines 1-2) as this relates to restraining movement of the second permanent magnet block and this phrase contradicts the previous phrase of “in at least one direction” (lines 8-9 of Claim 1). There is a

Art Unit: 3729

great deal of confusion and uncertainty as to the movement of the second permanent magnet block first being restrained in one direction (as recited in Claim 1), then movement is not restrained in the very same one direction, but in all of the other directions (as recited in Claim 2). So is movement of the second permanent magnet block restrained in the one direction or not?

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1, 2, 4, 5 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Hatayama et al 4,470,131.

Hatayama discloses a method of assembling permanent magnets comprising: restraining movement of a first permanent magnet block 7a in one vertical direction with an upper mold half 10a; mechanically restraining movement of the first permanent magnet block 7a in the one direction with positioning pins 11; placing a second permanent magnet block 7b in proximity of the first permanent magnet block, the second permanent magnet block having a magnetic orientation not in alignment with the magnetic orientation of the first permanent magnet block by virtue of each being in different planes; restraining movement of the second permanent block in one vertical direction with a lower mold half 10b; and mechanically restraining movement of the second permanent magnet block in the one vertical direction with positioning pins 11 in the lower mold half (see Figs. 3 and 5).

Regarding Claim(s) 2 and 8 and as best understood, Hatayama discloses that movement is restrained in all directions for each of the first and second permanent magnet blocks using a nonmagnetic frame (molding resin 4).

Regarding Claim(s) 5, Hatayama further teaches that the first and second permanent magnet blocks differ by an angle by virtue of each being located in different planes.

13. Claims 1-5 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Baermann 4,638,281.

Baermann discloses a method of assembling permanent magnets comprising: restraining movement of a first permanent magnet block (top magnet 30 in Fig. 1) in at least one radial direction by placing the first permanent magnet block in a nonmagnetic frame (carrier 12); mechanically restraining movement of the first permanent magnet block in the one radial direction with the use of a spring clip 44 (in Fig. 1); placing a second permanent magnet block (left magnet 30 in Fig. 1) in proximity of the first permanent magnet block, the second permanent magnet block having a magnetic orientation not in alignment with the magnetic orientation of the first permanent magnet block by virtue of each having different angles from axis 18; restraining movement of the second permanent block in at least one radial direction by placing the second permanent magnet in the nonmagnetic frame (carrier 12); and mechanically restraining movement of the second permanent magnet block in the one radial direction by another spring clip 44, which meets all of the limitations of the claimed invention.

Regarding Claim(s) 2 and 8 and as best understood, Baermann discloses that movement is restrained in all directions for each of the first and second permanent magnet blocks using the nonmagnetic frame (carrier 12) in conjunction with material 42.

Regarding Claim(s) 3, the nonmagnetic frame 12 of Baermann includes a “deformation” (recess 20) that mechanically restrains movement of the first permanent magnetic block in the one radial direction.

Regarding Claim(s) 4, the second permanent magnet block in Baermann can be alternatively selected such that it would be opposite the first permanent magnet block (as shown in Fig. 8) in circumference where each would have movement restrained in the same radial direction since each would be positioned 180 degrees from one another.

Regarding Claim(s) 9, Baermann further teaches applying an adhesive (moldable material 42) to one of the sides of each of the first and second permanent magnet blocks and adhering the first and second permanent magnet blocks to the nonmagnetic frame.

Regarding Claim(s) 10, Baermann further teaches removing any mechanical restraint (mold 94) once the adhesive, or after the adhesive 42 is set.

Regarding Claim(s) 11, Baermann further teaches fracturing one of the magnetic blocks while maintaining the position of the adjacent magnetic block with the nonmagnetic frame and removing the fractured magnetic block from the nonmagnetic frame (see col. 5, lines 30-35).

14. Claims 1 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Taneda et al 5,046,235.

Taneda discloses a method of assembling permanent magnets comprising: restraining movement of a first permanent magnet block 1L, 2b in one direction by placement of the first permanent magnet block in the device (shown in Fig. 1); mechanically restraining movement of the first permanent magnet block in the one direction with a 3 axis ball screw driven slides 30, 23 (in Fig. 1); placing a second permanent magnet block 1R, 2a in proximity of the first permanent



Art Unit: 3729

magnet block, the second permanent magnet block having a magnetic orientation not in alignment with the magnetic orientation of the first permanent magnet block by virtue of each being in different planes; restraining movement of the second permanent block in one direction by placement of the second permanent magnet block in the device (shown in Fig. 1); and mechanically restraining movement of the second permanent magnet block in the one direction with the 3 axis ball screw driven slides 30, 23 (in Fig. 1).

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baermann.

Baermann discloses the claimed manufacturing method as relied upon above in Claims 1, 4 and 5, further including that the magnetic orientation of the first and second permanent magnet blocks differ by some angle from axis 18. However, Baermann does not say whether this angle is 30 degrees. The specific angle of magnetic orientation is considered to be an effective variable within the level of ordinary skill in the art of assembling permanent magnet blocks in a radial orientation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided angle of 30 degrees as the angle of magnetic orientation between the first and second permanent magnet blocks, since it has been held that discovering an

Art Unit: 3729

optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).


***Conclusion***

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 571-272-4570. The examiner can normally be reached on Monday - Friday 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**A. Dexter Tugbang**  
**Primary Examiner**  
**Art Unit 3729**

December 27, 2005